



Laser Harp (Frameless - Open Source)

Written By: Ruete

TOOLS:

- [Alligator Leads \(1\)](#)
- [Glue \(1\)](#)
- [Insulating tape \(1\)](#)
- [Long Nose Pliers \(1\)](#)
- [Multimeter \(1\)](#)

PARTS:

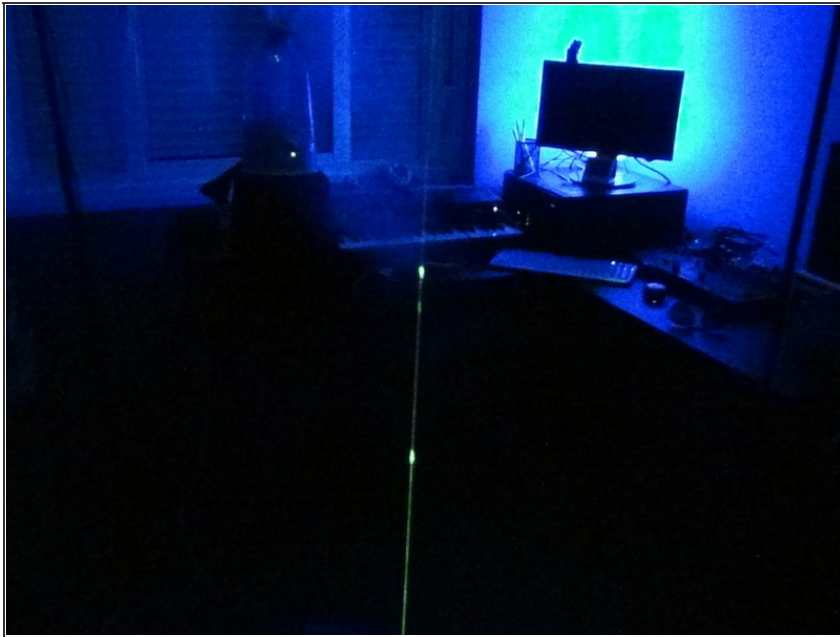
- [Protoboard \(1\)](#)
- [Arduino Uno \(1\)](#)
- [Green Laser Pointer \(1\)](#)
- [Resistor 220 ohms 1/4W \(1\)](#)
- [Power Supply, 5V DC, regulated 1A minimum \(1\)](#)
- [Power Supply, 15V DC, regulated 5A minimum \(1\)](#)
- [Power Supply, 9V DC, regulated 1A minimum \(1\)](#)
- [ULN2003 \(1\)](#)
- [Jumper Wire \(1\)](#)
- [2N2222 TRANSISTOR \(1\)](#)
- [LDR Light Sensor \(1\)](#)
- [MIDI jack \(1\)](#)
- [5k TRIMPOT \(1\)](#)

- [Wine Cork Stopper \(1\)](#)
- [Small Mirror Piece \(1\)](#)
- [Green Laser Safety Goggles \(1\)](#)
- [White Gloves \(1\)](#)
- [Step motor \(1\)](#)

SUMMARY

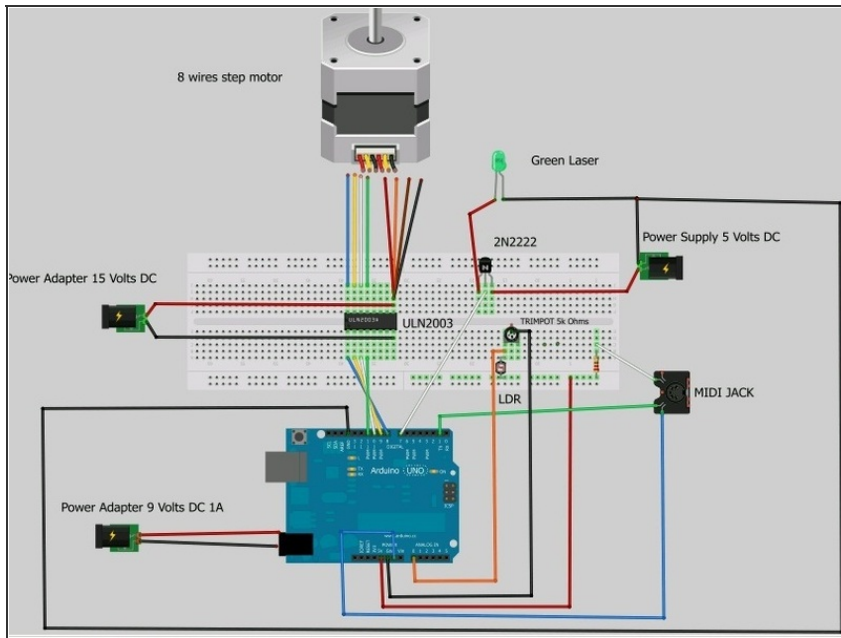
I felt in love with Laser Harps the first time I saw Jean Michel Jarre play it live in concert (Rendezvous 2 song). Since technology has developed so much it is now possible to build your own homemade DIY Frameless Laser Harp.

Step 1 — Laser Harp (Frameless - Open Source)



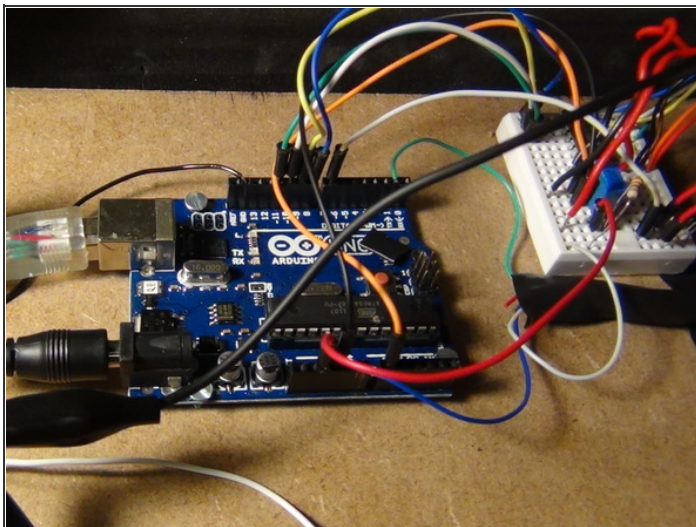
- Testing phase from Studio.

Step 2



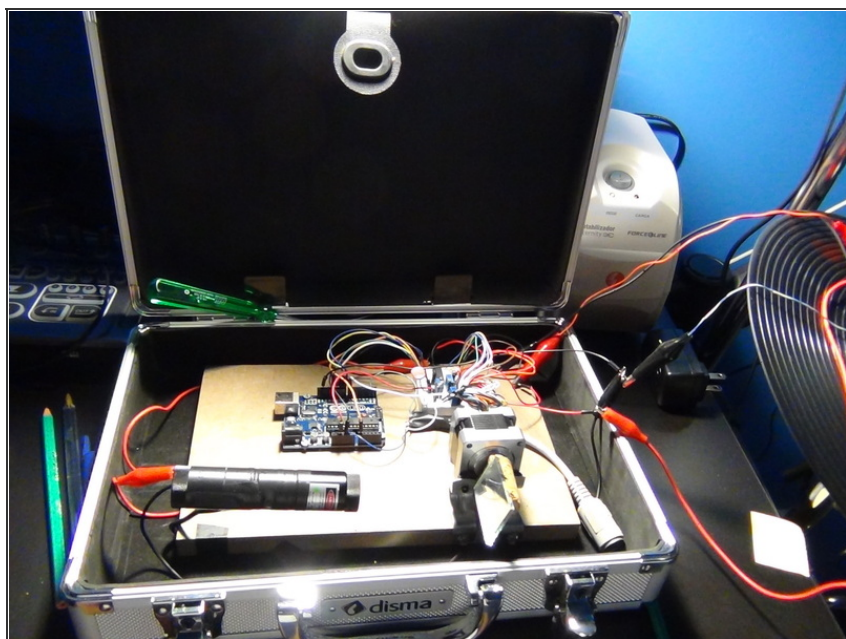
- Here is a Fritzing drawing with all componentes wired using a solderless breadboard for simplicity. No soldering required.
- List of all components is featured above.

Step 3



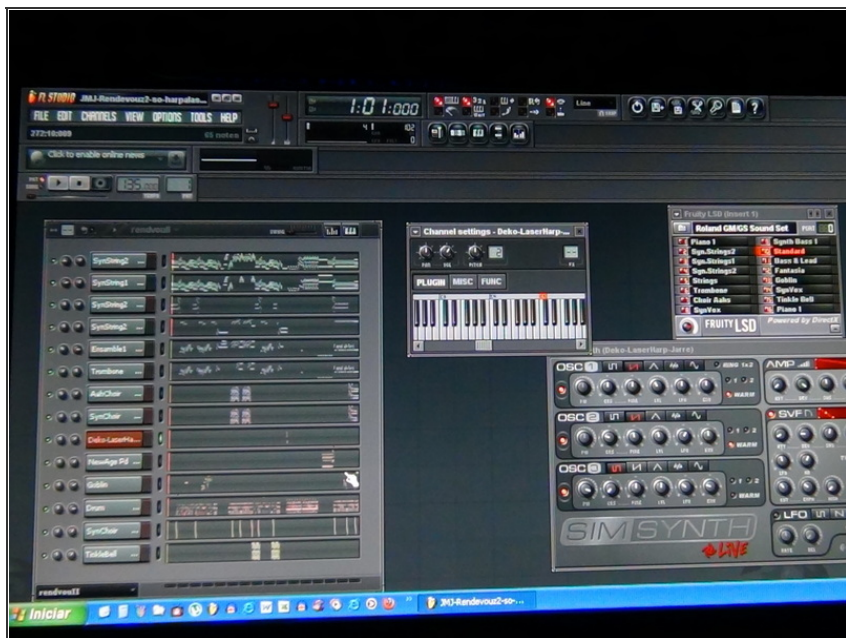
- Arduino programming code:
- // Open Source Laser Harp by Ruete // Free for home use. Comercial use proibited. //
Circuito MIDI: // * digital in 1 conectado ao MIDI jack pin 5 (DO MIDI JACK) // * MIDI jack
pin 2 conectado ao ground (DO ARDUINO) // * MIDI jack pin 4 (DO MIDI JACK) conectado
ao +5V (DO ARDUINO) por um resistor de 220-ohm int buttonPresses = 0; // quantas
vezes a nota foi tocada int LaserState = LOW; // laser "off" int delayligado = 3; //minimo 3
para aparecer direito o laser int delaydesligado = 3; // minimo 3 para separar direito os
raios em 9 long previousMillis = 0; // guarda ultima vez que o

Step 4



- This is an open source laser harp project. The latest version of Arduino programming code can be downloaded at my blog. Also there is a video demonstration there.

Step 5



- Any questions and improvement ideas are welcome. Visit my blog at:
<http://harplaser.blogspot.com>

This document was last generated on 2012-10-31 11:58:30 PM.